PLAY & LEARN

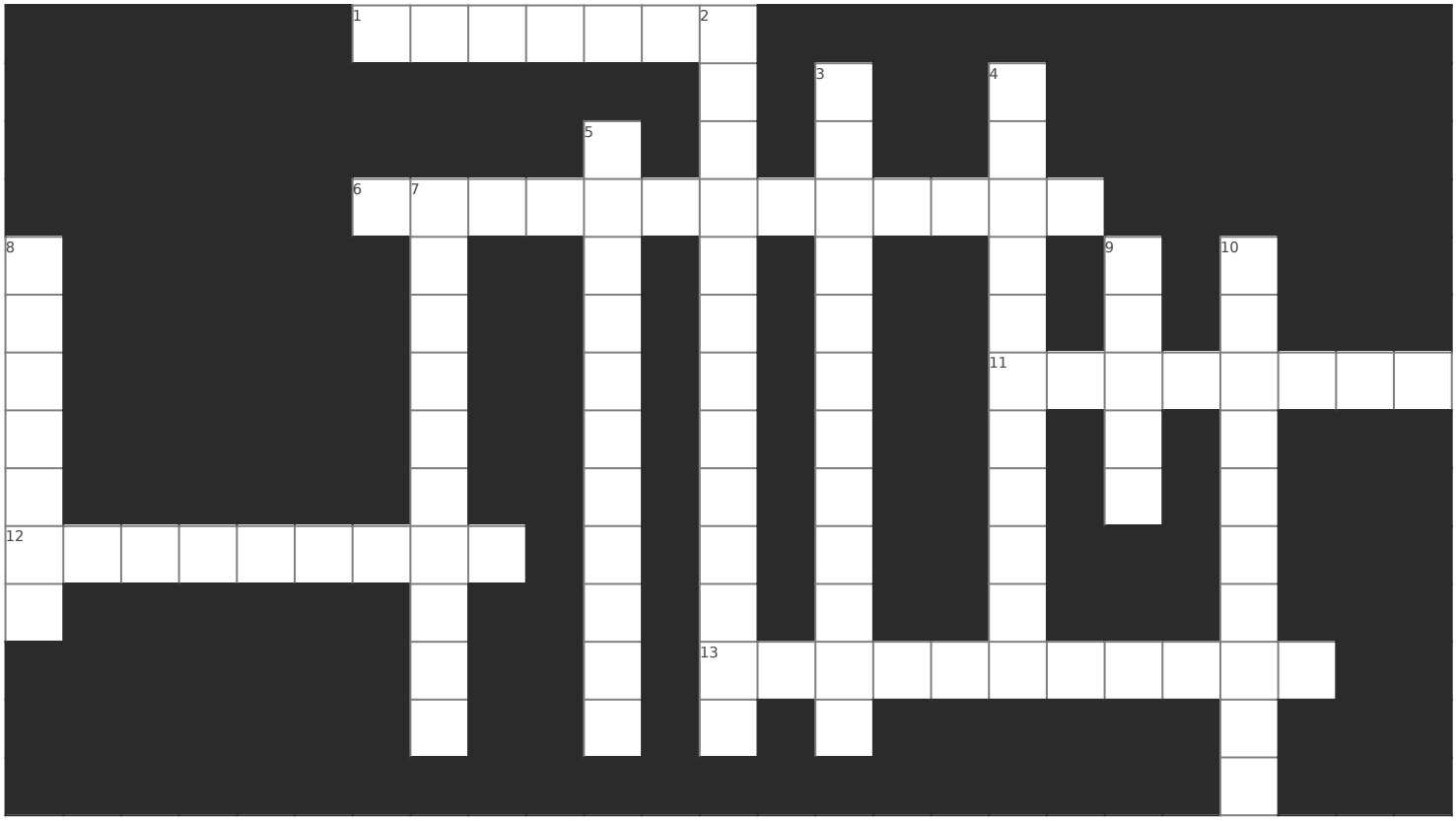
A puzzle workbook — crosswords, word searches, scrambles and quiz games

Print it. Solve it. Race a friend. Answer keys are at the back — no peeking.

#	Puzzle	Play it	Time
1	The Crossword	Solo or pairs	15 min
2	Word Search	Solo — race the clock	10 min
3	Scrambled Terms	Solo	8 min
4	Odd One Out	Teams of 4	10 min
5	Chapter Scrabble	Groups of 3–4	20 min
6	Who Am I? — Clue Cards	Whole class	15 min
7	True or False Sprint	Whole class, standing	6 min
8	Bingo	Whole class	15 min
9	Two Truths and a Lie	Pairs	10 min
10	The Escape Challenge	Teams of 4	25 min

Puzzle 1 · The Crossword

Every answer is a word from this chapter. Fill the white squares — one letter per square.



ACROSS

1. the broadest rank in the five-kingdom system (7)

6. unable to make its own food; must consume others (13)

11. surname of the scientist who founded modern taxonomy (8)

12. gradual change in species over time (9)

13. able to make its own food (11)

DOWN

2. made of many cells (13)

3. the variety of life forms in an ecosystem or on Earth (12)

4. made of a single cell (11)

5. lacking a well-defined nucleus (11)

7. having a well-defined, membrane-bound nucleus (10)

8. the basic unit of biological classification (7)

9. the classification rank above species (5)

10. a feature that helps a species survive its environment (10)

Bonus words that did not fit the grid — define each one in a sentence: WHITTAKER

Puzzle 2 · Word Search

16 terms are hiding in the grid — across, down, diagonally, and backwards. Circle each one, then tick it off the list. Beat 10 minutes and you win.

K	W	R	A	P	Y	N	O	I	T	U	L	O	V	E
T	D	K	W	W	R	G	X	S	M	K	C	E	Z	S
Z	M	C	B	H	G	O	V	T	I	F	A	O	U	M
C	Y	C	R	I	E	T	K	A	A	T	M	E	Z	M
I	T	L	D	T	N	A	O	A	N	P	A	G	I	H
T	I	A	N	T	U	D	F	A	R	N	L	G	Q	O
O	S	S	A	A	S	A	L	J	N	Y	N	I	S	E
Y	R	S	L	K	K	P	Z	I	H	U	O	E	U	B
R	E	I	A	E	I	T	L	L	F	C	I	T	E	X
A	V	F	D	R	N	A	R	I	E	C	P	Q	I	U
K	I	Y	N	P	G	T	S	R	E	G	J	T	R	C
U	D	S	U	J	D	I	U	P	G	B	M	W	J	A
E	O	R	S	X	O	O	S	H	B	H	A	Z	E	L
X	I	Y	V	A	M	N	Y	M	O	N	O	X	A	T
I	B	D	G	A	U	T	O	T	R	O	P	H	I	C

☐ BIODIVERSITY	☐ PROKARYOTIC	☐ AUTOTROPHIC
☐ EUKARYOTIC	☐ ADAPTATION	☐ WHITTAKER
☐ EVOLUTION	☐ SUNDALAND	☐ LINNAEUS
☐ CLASSIFY	☐ TAXONOMY	☐ SPECIES
☐ KINGDOM	☐ PLANTAE	☐ GENUS
☐ FUNGI		

Race Rules

- **Solo:** find all the words. Note your time at the top of the page.
- **Pairs:** one partner finds across-and-down words, the other finds diagonals. First pair to complete the list wins.
- **Hard mode:** cover the word list. Find as many chapter terms as you can in 5 minutes.
- **Champion move:** for every word you find, say what it means out loud. No meaning, no point.

Puzzle 3 · Scrambled Terms

Every row is a chapter word with its letters shuffled. Unscramble it. The clue in brackets is your lifeline — try to solve without it first.

#	Scrambled letters	Clue	Your answer
1	P T O E T I H H C E O R R	(unable to make its own food)	_____
2	A N A S T L O F I I C I C S	(organising living things into groups)	_____
3	B R V I I I E Y O T S D	(the variety of life forms present)	_____
4	M T O X Y N A O	(the science of classification)	_____
5	M C U R E U T L A I L L L	(made of many cells)	_____
6	C T C I E I I F S N	(____ name — the two-word Latin name of a species)	_____
7	A D T A O A T I P N	(a feature helping survival in an environment)	_____
8	I O R T C P Y A O K R	(lacking a well-defined nucleus)	_____

Make It a Game

Beat the Bell: the teacher sets a 60-second timer. Every unscrambled word inside the bell = 1 point; a word you can also *define* = 3 points.

Chain Scramble: in a circle, each student scrambles a chapter word for the person on their left. Miss it and you are out. Last student standing wins.

Puzzle 4 · Odd One Out

Three belong together. One does not. Circle the odd one — then write why in one line. The "why" is where the marks are.

#	Which is the odd one out?	Because…
1	Species · Genus · Kingdom · Fulcrum	_____
2	Monera · Protista · Fungi · Xylem (five-kingdom members)	_____
3	Linnaeus · Whittaker · Newton · Robert Whittaker (again, distractor)	_____
4	Autotrophic · Heterotrophic · Unicellular · Sublimation	_____
5	Two-kingdom system · Five-kingdom system · Scientific name · Torque	_____
6	Prokaryotic · Eukaryotic · Nucleus · Fulcrum	_____

Puzzle 5 · Chapter Scrabble

Play in groups of 3–4. You have one shared rack of letter tiles. Build only terms from this chapter — no ordinary English words allowed.

Your tile rack — cut these out or write them on paper squares:

A 1	**B** 3	**C** 3	**D** 2	**E** 1	**G** 2	**H** 4
I 1	**L** 1	**M** 3	**N** 1	**O** 1	**P** 3	**R** 1
S 1	**T** 1	**U** 1	**V** 4	**X** 8	**Y** 4	**Z** 10

Scoring:

You did this	Points
Each letter tile used	Its tile value
Word is a term from this chapter	× 2
Word is 8 letters or longer	+ 10 bonus
You can state its meaning correctly	+ 5
You can connect it to a real-life example	+ 3
Word is *not* in this chapter (challenged and lost)	− 5

How a Round Works

1. Player builds a word from the rack and lays it down.
2. Any opponent may **challenge** within 10 seconds: "That's not in this chapter."
3. Open the textbook. If the challenger is right, the word is removed and the builder loses 5 points. If the challenger is wrong, the *challenger* loses 5 points.
4. Builder states the meaning to claim the +5 bonus. The group votes on whether it was correct.
5. Play 6 rounds. Highest total wins.

Target Words (worth the most — do not show your opponents)

HETEROTROPHIC · CLASSIFICATION · BIODIVERSITY · MULTICELLULAR · TAXONOMY · PROKARYOTIC · EUKARYOTIC · ADAPTATION

Puzzle 6 · Who Am I? — Clue Cards

Cut along the lines. One student draws a card and reads only the first clue aloud; the class guesses. Wrong guess? Read clue 2. Fewer clues used = more points.

CARD 1 ① I am the basic unit of biological classification. ② Members of me can interbreed and produce fertile offspring. ③ I am a species.	**CARD 2** ① I sit one rank above species. ② I am the first word of a scientific name. ③ I am a genus.
CARD 3 ① I am the broadest classification rank in the five-kingdom system. ② Monera, Protista, Fungi, Plantae and Animalia are examples of me. ③ I am a kingdom.	**CARD 4** ① I have a well-defined, membrane-bound nucleus. ② Plant and animal cells are examples of me. ③ I am eukaryotic.
CARD 5 ① I lack a well-defined nucleus. ② Bacteria are examples of me. ③ I am prokaryotic.	**CARD 6** ① I can make my own food. ② Green plants are examples of me. ③ I am autotrophic.
CARD 7 ① I cannot make my own food. ② Animals are examples of me. ③ I am heterotrophic.	**CARD 8** ① I founded the modern system of naming species. ② My binomial system uses two Latin words. ③ I am Carolus Linnaeus.
CARD 9 ① I proposed the five-kingdom system of classification. ② Before me, only two kingdoms were recognised. ③ I am Robert Whittaker.	**CARD 10** ① I am the variety of life forms in an ecosystem. ② India is one of the world's richest sources of me. ③ I am biodiversity.
CARD 11 ① I am gradual change in species over long periods. ② Natural selection drives me. ③ I am evolution.	**CARD 12** ① I am a feature that helps a species survive its environment. ② A camel's hump is an example of me. ③ I am an adaptation.

Scoring: guessed after clue ① = **5 points** · after ② = **3 points** · after ③ = **1 point**

Puzzle 7 · True or False Sprint

Everyone stands. Teacher reads a statement. True → stay standing. False → sit down. Get it wrong and you are out. Last student standing wins.

#	Statement	Your call
1	Species is the broadest rank of classification.	☐ True ☐ False
2	Kingdom is the broadest rank of classification.	☐ True ☐ False
3	Eukaryotic cells lack a well-defined nucleus.	☐ True ☐ False
4	Prokaryotic cells lack a well-defined nucleus.	☐ True ☐ False
5	Autotrophic organisms make their own food.	☐ True ☐ False
6	Heterotrophic organisms make their own food.	☐ True ☐ False
7	Carolus Linnaeus founded the binomial naming system.	☐ True ☐ False
8	Robert Whittaker proposed the five-kingdom system.	☐ True ☐ False
9	The two-kingdom system had five kingdoms.	☐ True ☐ False
10	Biodiversity refers to the variety of life forms present.	☐ True ☐ False
11	A scientific name has two Latin words: genus and species.	☐ True ☐ False
12	The genus name in a scientific name is capitalised.	☐ True ☐ False
13	India is considered one of the world's richest biodiversity regions.	☐ True ☐ False
14	Evolution means species stay exactly the same forever.	☐ True ☐ False

Puzzle 8 · Bingo

Each student fills the empty grid below with any 16 words from the word bank — in any order, one per box. The teacher then reads out meanings, not names. Cross a box only when its meaning is called. First to a full row, column or diagonal shouts BINGO.

Word bank — choose any 16:

Species	Genus	Kingdom	Eukaryotic
Prokaryotic	Autotrophic	Heterotrophic	Linnaeus
Whittaker	Biodiversity	Evolution	Adaptation
Unicellular	Multicellular	Taxonomy	Classification

Your bingo card:

> **Caller’s List (teacher only — read the meaning, never the name)**
>
> ① "I am the basic unit of biological classification." ② "I sit one rank above species." ③ "I am the broadest rank in the five-kingdom system." ④ "I have a well-defined, membrane-bound nucleus." ⑤ "I lack a well-defined nucleus." ⑥ "I can make my own food." ⑦ "I cannot make my own food." ⑧ "I founded the binomial naming system." ⑨ "I proposed the five-kingdom system." ⑩ "I am the variety of life forms present." □ "I am gradual change in species over time." □ "I am a feature that helps survival in an environment."

Puzzle 9 · Two Truths and a Lie

Each set has three statements. Two are true, one is a lie. Circle the lie — and correct it in one line.

Set 1

(a) Species is the broadest classification rank.
(b) Kingdom is the broadest classification rank.
(c) Species is the most specific classification rank.

The lie is _____ . Corrected: _____

Set 2

(a) Autotrophs make their own food.
(b) Heterotrophs make their own food.
(c) Plants are typically autotrophic.

The lie is _____ . Corrected: _____

Set 3

(a) Linnaeus proposed the five-kingdom system.
(b) Whittaker proposed the five-kingdom system.
(c) Linnaeus founded the binomial naming system.

The lie is _____ . Corrected: _____

Set 4

(a) A scientific name has two words.
(b) The species name is capitalised.
(c) The genus name is capitalised.

The lie is _____ . Corrected: _____

Puzzle 10 · The Escape Challenge

Solve all five gates. Each gives you one digit. Collect all five to unlock the exit code.

🔒 GATE 1 — The Kingdom Gate

How many kingdoms are in Whittaker's system? Use that number.

Digit: ☐

🔒 GATE 2 — The Name Gate

A scientific name has how many words (genus + species)? Use that number.

Digit: ☐

🔒 GATE 3 — The Cell Gate

How many cell types are named (prokaryotic, eukaryotic)? Use that number.

Digit: ☐

🔒 GATE 4 — The Nutrition Gate

How many nutrition types are named (autotrophic, heterotrophic)? Use that number.

Digit: ☐

🔒 GATE 5 — The Old System Gate

How many kingdoms were in the old system, before Whittaker? Use that number.

Digit: ☐

EXIT CODE: ☐ ☐ ☐ ☐ ☐

🔒 Teacher’s note

Hide the gate cards around the classroom. Teams rotate every 4 minutes. First team to reach the door with the correct code escapes. Losing teams try again next period.

🔑 Answer Keys

Teachers and self-checkers only. Solve first — the puzzle is the point.

Puzzle 1 · Crossword — Solved Grid

Across: 1 KINGDOM · 6 HETEROTROPHIC · 11 LINNAEUS · 12 EVOLUTION · 13 AUTOTROPHIC

Down: 2 MULTICELLULAR · 3 BIODIVERSITY · 4 UNICELLULAR · 5 PROKARYOTIC · 7 EUKARYOTIC · 8 SPECIES · 9 GENUS · 10 ADAPTATION

Puzzle 2 · Word Search — Solved Grid

K	W	R	A	**P**	Y	**N**	**O**	**I**	**T**	**U**	**L**	**O**	**V**	**E**
T	D	K	W	**W**	**R**	G	X	S	M	K	C	**E**	Z	**S**
Z	M	C	B	**H**	**G**	**O**	V	T	I	F	**A**	O	**U**	M
C	**Y**	**C**	R	**I**	**E**	T	**K**	A	A	**T**	M	**E**	Z	M
I	**T**	**L**	**D**	**T**	**N**	**A**	O	**A**	**N**	P	**A**	G	**I**	H
T	**I**	**A**	**N**	**T**	**U**	**D**	F	**A**	**R**	**N**	L	**G**	Q	O
O	**S**	**S**	**A**	**A**	**S**	**A**	**L**	J	**N**	**Y**	**N**	I	**S**	E
Y	**R**	**S**	**L**	**K**	**K**	**P**	Z	**I**	H	**U**	**O**	**E**	U	B
R	**E**	**I**	**A**	**E**	**I**	**T**	**L**	L	**F**	C	**I**	**T**	E	X

A	**V**	**F**	**D**	**R**	**N**	**A**	R	I	E	**C**	P	Q	**I**	U
K	**I**	**Y**	**N**	P	**G**	**T**	S	R	**E**	G	J	T	R	**C**
U	**D**	S	**U**	J	**D**	**I**	U	**P**	G	B	M	W	J	A
E	**O**	R	**S**	X	**O**	**O**	**S**	H	B	H	A	Z	E	L
X	**I**	Y	V	A	**M**	**N**	**Y**	**M**	**O**	**N**	**O**	**X**	**A**	**T**
I	**B**	D	G	**A**	**U**	**T**	**O**	**T**	**R**	**O**	**P**	**H**	**I**	**C**

Puzzle 3 · Scrambled Terms

1. HETEROTROPHIC · 2. CLASSIFICATION · 3. BIODIVERSITY · 4. TAXONOMY · 5. MULTICELLULAR · 6. SCIENTIFIC · 7. ADAPTATION · 8. PROKARYOTIC

Puzzle 4 · Odd One Out

#	Odd one	Because
1	Fulcrum	species, genus and kingdom are classification ranks; fulcrum belongs to Chapter 7
2	Xylem	Monera, Protista and Fungi are three of the five kingdoms; xylem is a Chapter 3 plant tissue
3	Newton	Linnaeus and Whittaker are classification scientists in this chapter; Newton is not
4	Sublimation	autotrophic, heterotrophic and unicellular are all biology terms from this chapter; sublimation belongs to Chapter 5
5	Torque	the other three are classification concepts; torque belongs to Chapter 6
6	Fulcrum	prokaryotic, eukaryotic and nucleus are all cell-classification terms; fulcrum belongs to Chapter 7

Puzzle 7 · True or False Sprint

1-F · 2-T · 3-F · 4-T · 5-T · 6-F · 7-T · 8-T · 9-F · 10-T · 11-T · 12-T · 13-T · 14-F

Puzzle 9 · Two Truths and a Lie

Set	The lie	Correction
1	a	Kingdom is the broadest rank, not species — species is the most specific.
2	b	Heterotrophs CANNOT make their own food — they must consume other organisms.

Set	The lie	Correction
3	a	Whittaker proposed the five-kingdom system; Linnaeus founded binomial nomenclature.
4	b	The species part of the name is lowercase; only the genus name is capitalised.

Puzzle 10 · The Escape Challenge

EXIT CODE: 5 · 2 · 2 · 2 · 2

(Answer: 5) (Answer: 2) (Answer: 2) (Answer: 2) (Answer: 2)

Now go classify five living things you saw today into their correct kingdom. □□